

IN THE CLAIMS:

Please **AMEND** the claims as follows:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Currently Amended) The method of Claim 8 ~~4~~, wherein a child thread's initial value of a thread-local variable is a copy of a corresponding parent thread's value of a thread-local variable.
7. (Currently Amended) The method of Claim 8 ~~4~~, wherein a child thread's value of a thread-local variable is a predetermined function of a corresponding parent thread's value of a thread-local variable.
8. (Previously Amended) A method for providing inheritable thread-local storage from a parent thread to a child thread, the method comprising:
for each thread-local variable, mapping each thread-local variable to a value;

when a parent thread creates a child thread, automatically iterating over the parent thread's values to create the child thread's initial values;

wherein the step of mapping comprises maintaining a map, associated with each thread object, that maps each thread-local variable to a value and wherein the step of iterating comprises iterating over the map;

wherein the map comprises a hash table;

wherein the step of mapping further comprises creating a separate hash table for inheritable values and a separate hash table for non-inheritable values.

9. (Previously Amended) A method for providing inheritable thread-local storage from a parent thread to a child thread, the method comprising:

for each thread-local variable, mapping each thread-local variable to a value; and

when a parent thread creates a child thread, automatically iterating over the parent thread's values to create the child thread's initial values;

wherein the step of mapping comprises maintaining a map, associated with each thread-local variable, that maps each thread to a value, and wherein for each thread a linked list is maintained, the linked list linking inheritable thread-local values associated with the thread; and wherein the step of iterating comprises iterating over the linked list;

wherein the map comprises a hash table;

wherein the step of mapping further comprises creating a hash table having both inheritable values and non-inheritable values, wherein each value has a flag to identify whether each value in the table is an inheritable or non-inheritable value.

10. (Currently Amended) The method of Claim 8 2, wherein the method is implemented in a Java programming language as a class.

11. (Currently Amended) The method of Claim 9~~3~~, wherein the method is implemented in a Java programming language as a class.

12. (Cancelled)

13. (Currently Amended) The method of Claim 15~~12~~, wherein the child value is a copy of the corresponding parent value.

14. (Currently Amended) The method of Claim 15~~12~~, wherein the child value is a function of the corresponding parent value.

15. (Previously Amended) A method for providing automatic value inheritance when a parent thread creates a child thread, the method comprising:

associating, for each thread object, each thread-local variable with a value; and
automatically iterating over the thread-local values to create a child value corresponding to each inheritable parent value, when a child is created;

wherein the step of associating comprises creating a separate hash table for inheritable values and a separate hash table for non-inheritable values.

16. (Previously Amended) A method for providing automatic value inheritance when a parent thread creates a child thread, the method comprising:

associating, for each thread object, each thread-local variable with a value; and
automatically iterating over the thread-local values to create a child value corresponding to each inheritable parent value, when a child is created;

wherein the step of associating comprises creating a hash table having both inheritable values and non-inheritable values, wherein each value has a flag to identify whether each value in the table is an inheritable or non-inheritable value.

17. (Currently Amended) The method of Claim 15 ~~12~~, wherein the method is implemented in a Java programming language as a class.

18. (Cancelled)

19. (Currently Amended) The method of Claim 16 ~~18~~, wherein the child value is a copy of the corresponding parent value.

20. (Currently Amended) The method of Claim 16 ~~18~~, wherein the child value is a function of the corresponding parent value.

21. (Currently Amended) The method of Claim 16 ~~18~~, wherein the method is implemented in a Java programming language as a class.

22. (Cancelled)

23. (Currently Amended) The medium of Claim 25 ~~22~~, wherein the child value is a copy of the corresponding parent value.

24. (Currently Amended) The medium of Claim 25 ~~22~~, wherein the child value is a function of the corresponding parent value.

25. (Previously Amended) A computer readable medium including computer program code for providing automatic value inheritance when a parent thread creates a child thread, the parent thread having at least one thread-local object value, the computer readable medium comprising:

computer program code for associating, for each thread object, each thread-local variable with a value; and

computer program code for automatically iterating over the thread-local values to create a child value corresponding to each inheritable parent value, when a child is created;

wherein the computer code for associating comprises code for creating a separate hash table for inheritable values and a separate hash table for non-inheritable values.

26. (Previously Amended) A computer readable medium including computer program code for providing automatic value inheritance when a parent thread creates a child thread, the parent thread having at least one thread-local object value, the computer readable medium comprising:

computer program code for associating, for each thread object, each thread-local variable with a value; and

computer program code for automatically iterating over the thread-local values to create a child value corresponding to each inheritable parent value, when a child is created;

wherein the computer code for associating comprises computer code for creating a hash table having both inheritable values and non-inheritable values, wherein each value has a flag to identify whether each value in the table is an inheritable or non-inheritable value.

27. (Currently Amended) The medium of Claim 25, wherein the computer

program code is implemented in a Java programming language as a class.

28. (Cancelled)

29. (Currently Amended) The medium of Claim 26-28, wherein the child value is a copy of the corresponding parent value.

30. (Currently Amended) The medium of Claim 26-28, wherein the child value is a function of the corresponding parent value.

31. (Currently Amended) The medium of Claim 26-28, wherein the computer program code is implemented in a Java programming language as a class.

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) The method as recited in claim 8-1, wherein the method is performed in a single processor system.

35. (Currently Amended) The method as recited in claim 9-12, wherein the method is performed in a single processor system.